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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,949	09/18/2006	Marinus Frans van der Maas	VER-205XX	5558

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BOSTON, MA 02109

EXAMINER

CLEMENTE, ROBERT ARTHUR

ART UNIT	PAPER NUMBER
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1797

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09/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,949	Applicant(s) VAN DER MAAS, MARINUS FRANS	
	Examiner ROBERT A. CLEMENTE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 9, 12, 13, 15, 17-20 and 22-27 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 10, 11, 14, 16 and 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20060210, 20080523</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" has been used to designate both a clamp fitting and a transponder. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: The sections of the specification are not clearly labeled with headings, such as "Background of the Invention", "Brief Description of the Figures", etc. In page 4 line 4, "male part 4 or 5" should be changed to --male part 4 or 6--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 12, 18 - 20, 22 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 5 recites the limitation "the female parts". There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 5 should depend from claim 3.

6. Claims 12 and 26 use the trademark Teflon. The use of trademarks in the claims renders the claims indefinite because the definition of a trademark can be changed.

7. Claim 18 recites the limitation "the protective shell". There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 18 should depend from claim 17.

8. Claim 19 uses the trademarks nanochem and IPX. The use of trademarks in the claim renders the claim indefinite because the definition of a trademark can be changed.

9. Claim 20 recites the limitation "the optional protective shell". There is insufficient antecedent basis for this limitation in the claim. Additionally, the use of "optional" also makes the indefinite since it is not clear whether the structure is required in the claim.

10. Claim 22 recites the limitation "the transponder". There is insufficient antecedent basis for this limitation in the claim. The examiner believes claim 22 should depend from claim 21.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1, 3, 17, 18, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,652,749 to Stankowski et al.

Stankowski teaches An in-line filter provided with a substantially elongated filter housing in which filtering material is included, the filter housing being provided on a first end with an inflow opening and on a second, opposite end with an outflow opening, while at the inflow opening and the outflow opening fastening means are provided for fastening a supply or discharge tube, respectively, wherein the fastening means are quick-change couplings, a respective quick-change coupling having a coupled condition and an uncoupled condition, while in the quick-change coupling a shut-off valve is provided which, in the coupled condition, assumes an open position and thus allows gas to pass and which, in an uncoupled condition, assumes a closed position and thus does not allow gas to pass. Figure 1 of Stankowski shows an inline filter (12) provided with a substantially elongated filter housing. The filter (12) inherently includes filtering material. The filter has a coupling (20, 21) at each end that form the inflow and

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the outflow openings. The receivers (19, 22) form the other part of the fastening means that provide a supply and discharge tube. As shown the fastening means can be considered to be quick change couplings since the couplings (20, 21) just need to be slid into the receivers, which allows for a quick change. A valve (25, 26) is provided with both quick change couplings. In the coupled position the valve are open and in the uncoupled condition the valves are closed and no flow is allowed.

In regard to claim 3, the couplings (20, 21) form male parts and the receivers (19, 22) form female parts of the quick change coupling. As shown, a bore extends, which forms the fluid communication between the supply or discharge tube, respectively, and the inflow opening or outflow opening, respectively, of the filter housing, while, with the male parts (20, 21) and the female part (19, 22) in coupled condition, the quick-change coupling is in the coupled condition and with the male part and the female part in uncoupled condition, the quick-change coupling is in the uncoupled In regard to claim.

In regard to claims 17, 18, and 27, as discussed in column 3 lines 58 - 60, the filter (12) of Stankowski can include a reusable housing having a disposable inner cartridge. In this case, the inner cartridge can be considered the substantially elongated filter housing, as broadly claimed, and the reusable housing can be considered a protective shell, as broadly claimed. Since the protective shell is part of the filter (12) and the entire filter is between the receivers (19, 22), or female parts, the protective shell is inherently between the female parts.

13. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,194,233 to Kitahara et al.

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Kitahara teaches a filter provided with a filter housing in which filtering material is present for removing water, oxygen and hydrocarbons from a gas flow, where the filtering material does not contain alkali metals or alkaline earth metals. Figure 1 of Kitahara shows a filter for rare gas purification having a housing (not numbered) containing a getter (3). As disclosed in the abstract the filter removes water, oxygen, and hydrocarbons with a filtering material that does not contain alkali metals or alkaline earth metals.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 2, 4, 5, 8, 9, 13, 15, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stankowski.

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In regard to claim 2, as shown in figure 1, Stankowski provides one of the valves (25) in the supply or discharge tube, but the other valve (26) is provided in the coupling (21) of the filter. Thus, Stankowski does not disclose the shut-off valve of the quick change coupling at both the inflow and outflow openings to remain connected to the supply or discharge portions. One of ordinary skill in the art, however, would reasonably expect that the connection could be formed in an equivalent manner by using the identical top and bottom couplings with the valve in the supply or discharge parts. One of ordinary skill in the art would also reasonably expect that there may be situations where the entire filter needs to be replaced, in which case it would not be desirable to have to dispose of and replace a filter with a valve that will make the filter more costly. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stankowski to include both shut-off valves in the supply or discharge tubes so that the filter could be produced more cheaply without a valve and eliminating the need to dispose of an operating valve given the need for filter replacement.

In regard to claim 24, as discussed above in paragraph 12 with respect to claim 3, the couplings (20, 21) form male parts and the receivers (19, 22) form female parts of the quick change coupling. The male and female parts would remain the same regardless of the placement of the valves. As shown, a bore extends, which forms the fluid communication between the supply or discharge tube, respectively, and the inflow opening or outflow opening, respectively, of the filter housing, while, with the male parts (20, 21) and the female part (19, 22) in coupled condition, the quick-change coupling is

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in the coupled condition and with the male part and the female part in uncoupled condition, the quick-change coupling is in the uncoupled In regard to claim.

In regard to claims 4, 5, and 25, Stankowski shows the male parts to be connected to the filter and the female parts to be connected to the supply and discharge lines. One of ordinary skill in the art, however, would reasonably expect the location of the male and female parts to be a matter of design choice. As long as a coupling has both a male and a female part, it is not critical which part is located on the filter, or the supply or discharge tube. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stankowski to include the female parts on the filter and the male parts on the supply and discharge tubes as a matter of design choice since the location of the male and female parts is not critical and the couplings would function in a substantially equivalent manner.

In regard to claim 15, given the obvious modification discussed above where the female parts are located on the supply and discharge tubes, the female parts and filter housing would inherently be connected by a detachable connection.

In regard to claim 8, as discussed above, it would have been obvious to both include both valves in the supply and discharge tubes and to use the male parts on the supply and discharge tubes. Thus, performing both of these modifications of Stankowski would inherently lead to both shut-off valves being located in the male part on the supply and discharge tubes.

In regard to claim 9, as shown in figure 2a, the valve (26) of Stankowski in the coupling (21), or male part, is biased closed by a spring (11). The valve inherently would

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remain the same given the modification where the male part is located on the supply or discharge tube.

In regard to claim 13, as discussed in paragraph 12, Stankowski discloses a coupling where the male and female parts are pushed together. Stankowski does not disclose connecting the male and female parts by screw thread. The use of screw thread to connect male and female parts, however, is well known in the art. One of ordinary skill in the art would reasonably expect that couplings with the male and female parts only pushed together and held by friction could be susceptible to becoming inadvertently disconnected by a user that accidentally knocks into the filter, or supply or discharge lines. Screw connections need to be twisted for disconnection and predictably are more resistant to being accidentally disconnected. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Stankowski to include screw threads to connect the male and female parts in order to avoid the possibility of the filters becoming accidentally disconnected, given a situation where the filters are used in a location where the users are susceptible to knocking into the filter or the lines connected to the filter.

Allowable Subject Matter

17. Claims 6, 7, 10, 11, 14, 16, and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Other prior art references listed on the PTO-892 (Notice of References Cited) are considered to be of interest disclosing similar filters.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT A. CLEMENTE whose telephone number is (571)272-1476. The examiner can normally be reached on M-F, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAC

/Duane S. Smith/
Supervisory Patent Examiner, Art Unit 1797
9-4-08